ABSTRACT OF THE DISCLOSURE

An adsorption refrigeration system and method are provided, the system comprising an adsorption pump which, in use, is arranged in communication with a chamber containing liquid and gaseous coolant. The associated method comprises expanding the gaseous coolant into an auxiliary volume member so as to cause the removal of part of the gaseous coolant from the chamber. This causes a reduction in the temperature and pressure of the gaseous coolant in the chamber. The adsorption pump is then operated so as to further cool the chamber by causing the evaporation of the coolant liquid within the chamber.